

*Agriculture*

Forests, Parks and  
Conservation

Wastewater  
Treatment

*Marine Resources*

*Urban  
Development*

*Air Quality*

BRIEFING FOR  
ACADEMY FELLOWS  
at the ACADEMY FALL MEETING

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**TAKING ENVIRONMENTAL  
PROTECTION TO THE NEXT LEVEL:**

**An Assessment of the U.S. Environmental  
Services Delivery System**

NATIONAL ACADEMY OF  
PUBLIC ADMINISTRATION®

Thursday, November 15, 2007

# BACKGROUND

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## Purpose of Study

...an independent assessment of the United States environmental services delivery system and ways to optimize the capabilities of each level of government to achieve the greatest environmental and public health results.

## Environmental Service Delivery System

The key concept in...the “environmental services delivery system” (ESDS)... is...a new relationship between EPA and the states...to include joint priority setting, increased grant flexibility,...increased reliance on better performance measures focused on environmental results rather than on detailed oversight,...and negotiation rather than...states responding to federal mandates...

[A system]...dedicated to serving the public interest “no matter which government agency was responsible” and being “directly responsive to the people it serves.”...partner with local health departments, county governments, multi-county regional associations of governments, businesses, and the federal EPA to identify common values, visions, operating principles, and joint projects.



# BACKGROUND (cont.)

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Narrowed the study scope for manageability

- ✓ Water pollution control programs
- ✓ 40,000 “impaired waters” listed (addressed @250/yr.)

Geographic learning platform

- ✓ Chesapeake Bay watershed - 64,000 sq. miles; 6 states; DC; 3169 local govts; many other key layers
- ✓ Mature science; good interstate and interagency process
- ✓ Impaired waters designation
- ✓ Consent decree; 2010 clean-up deadline



# Impaired Waters Listed by States

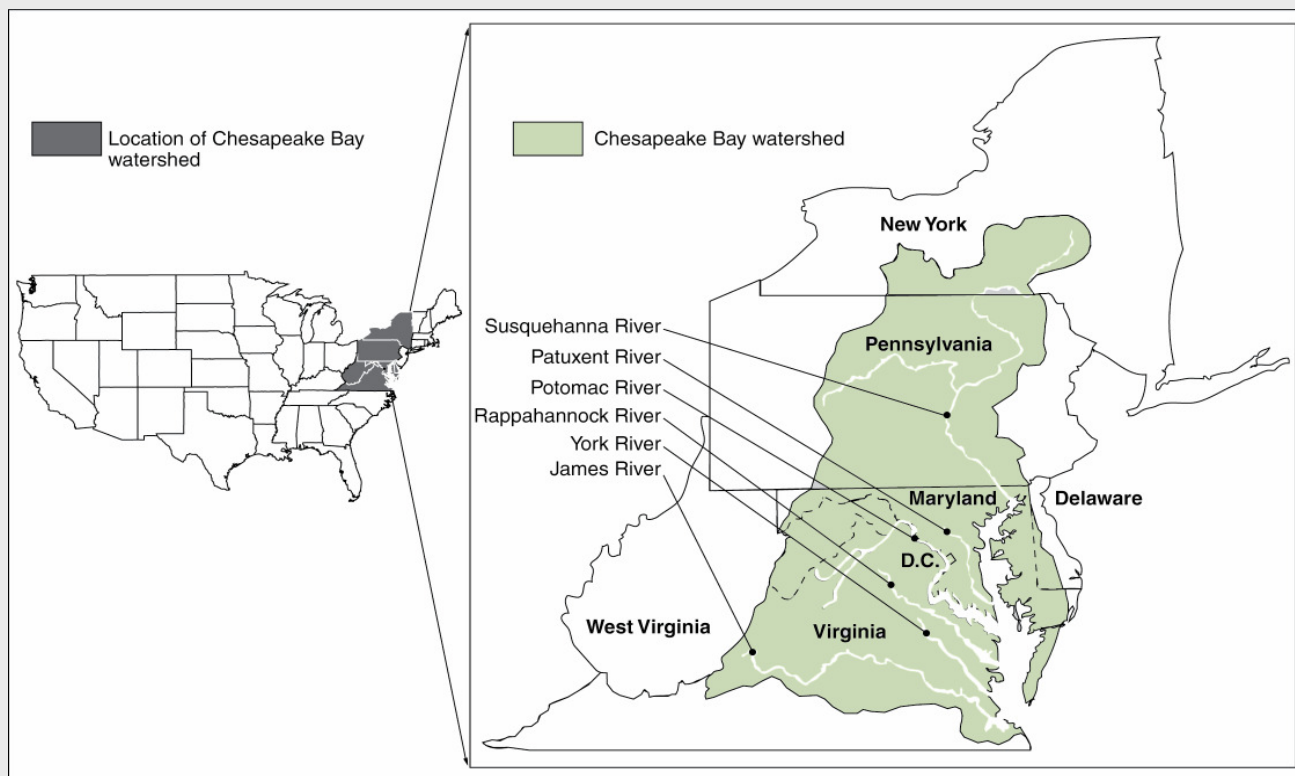
- ❖ The Total number is about 40,000.

State	Current System Version	# of Waters Listed	State	Current System Version	# of Waters Listed
<a href="#">PENNSYLVANIA</a>	2004	6957	<a href="#">MICHIGAN</a>	2004	379
<a href="#">NEW HAMPSHIRE</a>	2004	5192	<a href="#">TEXAS</a>	2002	299
<a href="#">WASHINGTON</a>	2004	1714	<a href="#">CONNECTICUT</a>	2004	267
<a href="#">MINNESOTA</a>	2004	1500	<a href="#">HAWAII</a>	2004	241
<a href="#">IDAHO</a>	2002	1392	<a href="#">LOUISIANA</a>	2004	234
<a href="#">KANSAS</a>	2002	1367	<a href="#">IOWA</a>	2004	213
<a href="#">VIRGINIA</a>	2004	1353	<a href="#">NORTH DAKOTA</a>	2004	211
<a href="#">INDIANA</a>	2004	1320	<a href="#">MAINE</a>	2002	201
<a href="#">OREGON</a>	2002	1177	<a href="#">MISSOURI</a>	2002	197
<a href="#">TENNESSEE</a>	2004	974	<a href="#">ALABAMA</a>	2004	179
<a href="#">ILLINOIS</a>	2004	952	<a href="#">NEW MEXICO</a>	2004	175
<a href="#">NEW JERSEY</a>	2002	899	<a href="#">VERMONT</a>	2002	173
<a href="#">WEST VIRGINIA</a>	2004	889	<a href="#">UTAH</a>	2002	166
<a href="#">FLORIDA</a>	2002	827	<a href="#">SOUTH DAKOTA</a>	2004	165
<a href="#">NEW YORK</a>	2004	792	<a href="#">NEBRASKA</a>	2004	150
<a href="#">MASSACHUSETTS</a>	2002	775	<a href="#">RHODE ISLAND</a>	2004	148
<a href="#">KENTUCKY</a>	2004	736	<a href="#">WYOMING</a>	2004	129
<a href="#">SOUTH CAROLINA</a>	2002	713	<a href="#">ARKANSAS</a>	2002	103
<a href="#">CALIFORNIA</a>	2002	686	<a href="#">NEVADA</a>	2002	99
<a href="#">NORTH CAROLINA</a>	2002	630	<a href="#">PUERTO RICO</a>	2004	86
<a href="#">WISCONSIN</a>	2004	613	<a href="#">COLORADO</a>	1998	79
<a href="#">MONTANA</a>	2002	527	<a href="#">ARIZONA</a>	2004	66
<a href="#">MISSISSIPPI</a>	2002	490	<a href="#">VIRGIN ISLANDS</a>	2004	51
<a href="#">MARYLAND</a>	2004	473	<a href="#">ALASKA</a>	2004	35
<a href="#">GEORGIA</a>	2002	447	<a href="#">DISTRICT OF COLUMBIA</a>	2004	17
<a href="#">OKLAHOMA</a>	2002	436	<a href="#">GUAM</a>	1998	3
<a href="#">OHIO</a>	2004	428	<a href="#">N. MARIANA ISLANDS</a>	1998	2
<a href="#">DELAWARE</a>	2004	379	<a href="#">AMERICAN SAMOA</a>	1998	1



# The Chesapeake Bay Learning Platform

- ❖ The Chesapeake Bay is the largest estuary in North America:
  - ✓ Very fertile and productive, yet fragile
  - ✓ Home to 16 million people
  - ✓ Includes parts of 6 states—Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia, plus the District of Columbia



Sources: Chesapeake Bay Program Office and GAO.







# BACKGROUND (cont.)

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## Study Methodology

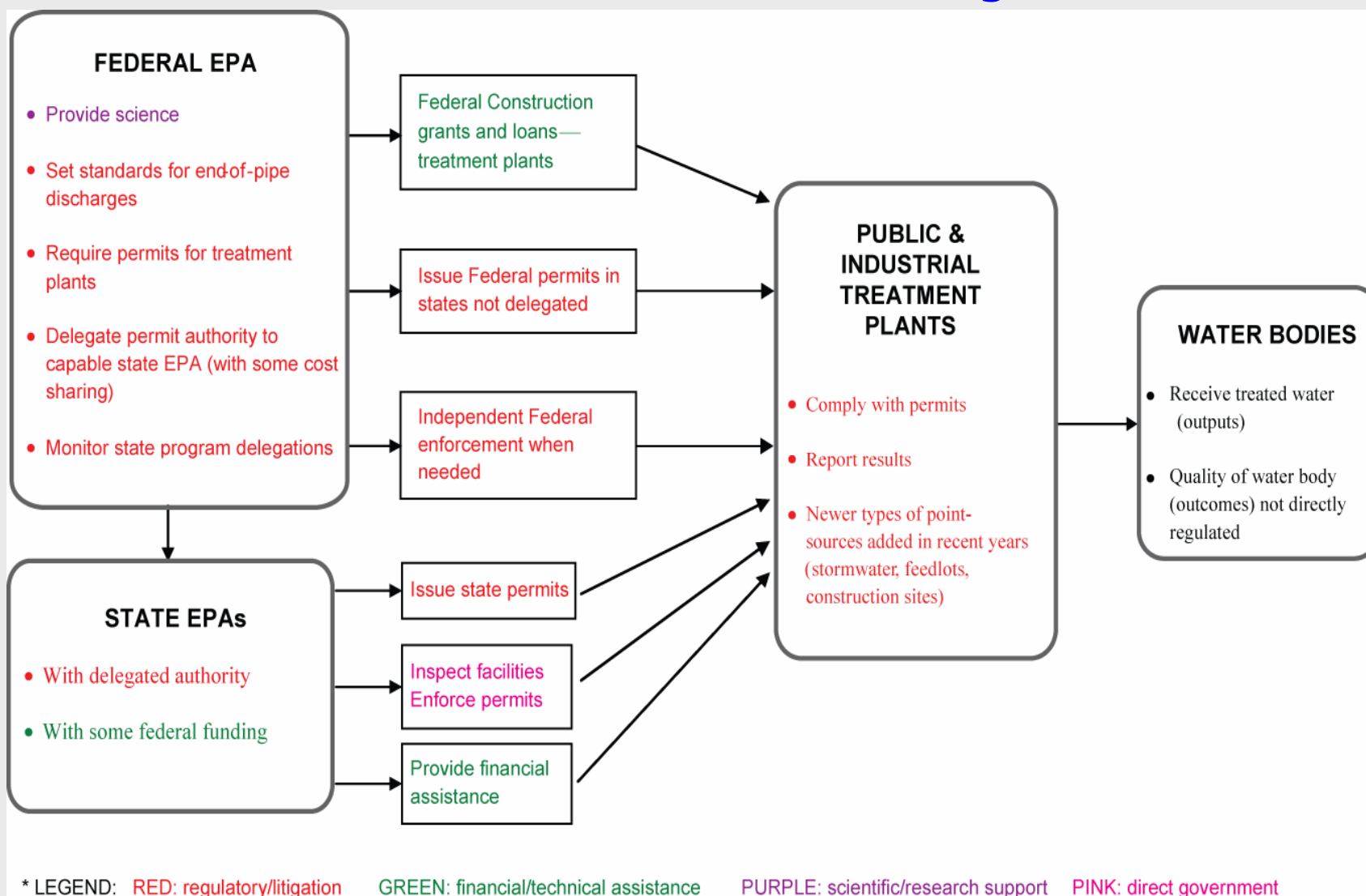
- ✓ Logic models
- ✓ Tools of government analysis
- ✓ A gap analysis

## Study released June 15, 2007

- ✓ Findings & conclusions
- ✓ Recommendations for National action



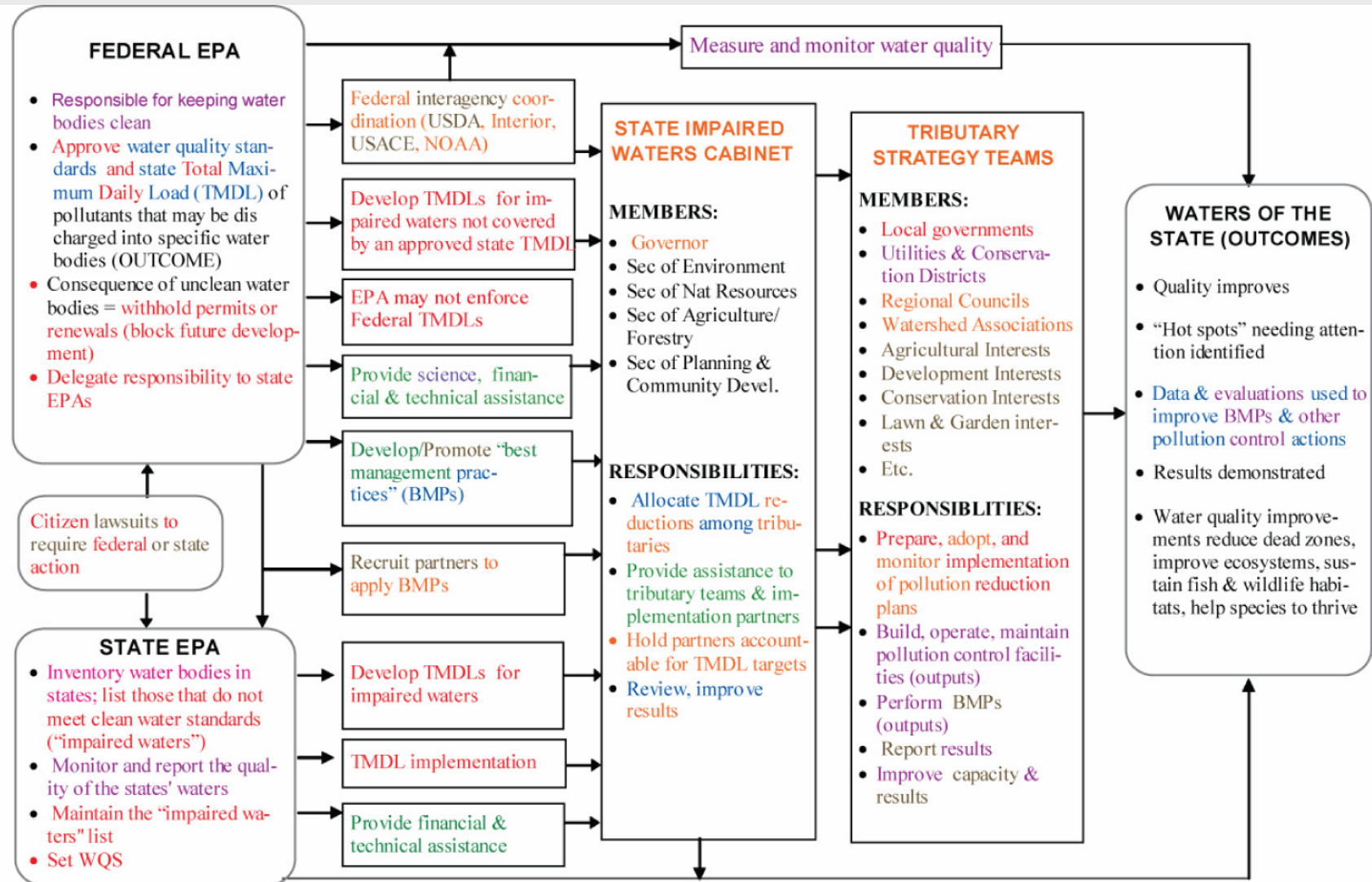
# Heavily Used Traditional Point-Source Water Pollution Control Logic<sup>+</sup>



<sup>+</sup> (may be as little as 30 percent of the “impaired waters” problem in some watersheds)



## Lightly Used NonPoint-Source Water Pollution Control Logic+



\* LEGEND: RED: regulatory/litigation GREEN: financial/technical assistance PURPLE: scientific/research support  
BLUE: data/reporting ORANGE: coordination/accountability PINK: direct government BROWN: voluntary action

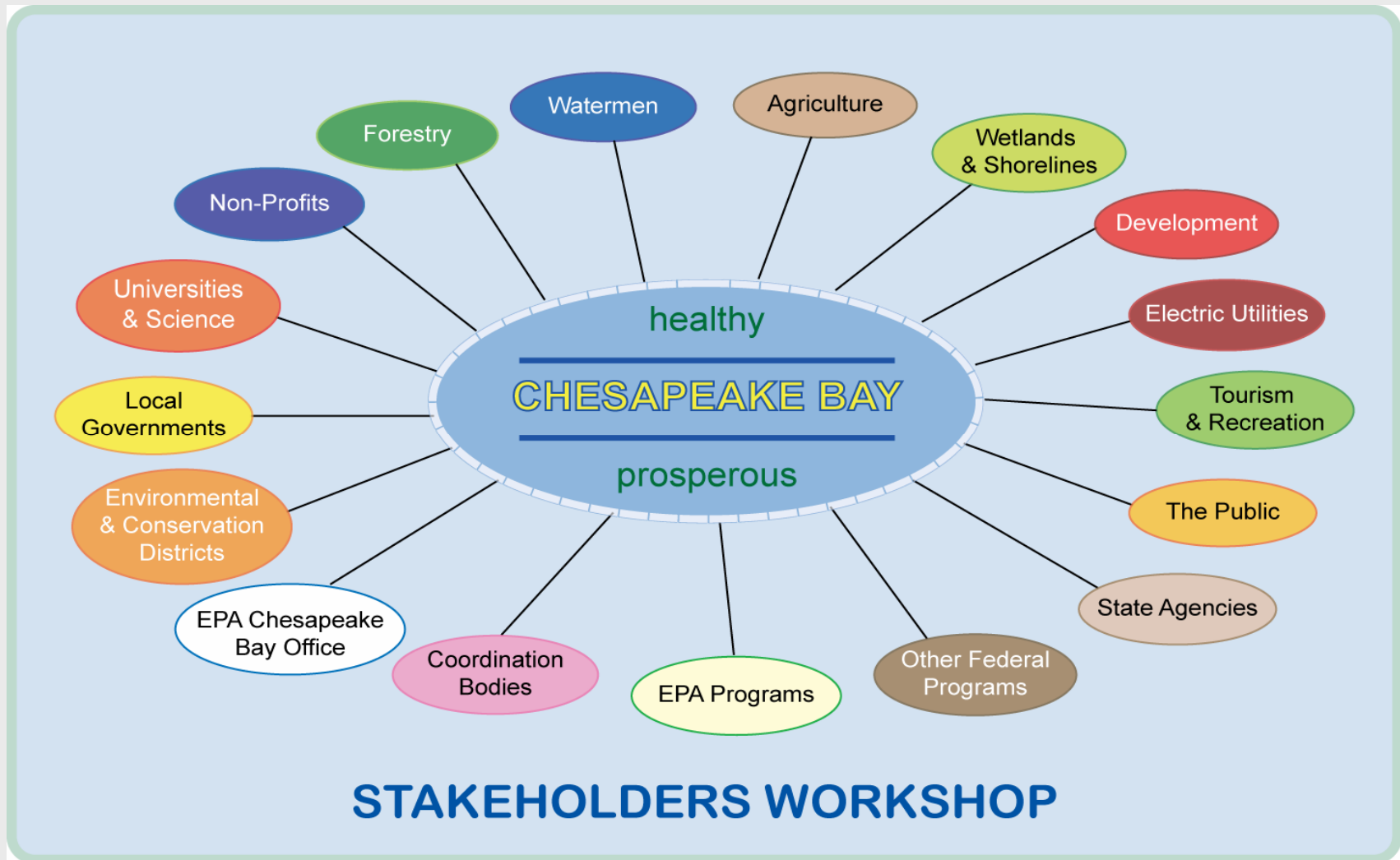
<sup>+</sup> (may be as much as 70% of the impaired waters problem in some watersheds)

# Composite Logic Model of a Healthy Chesapeake Bay



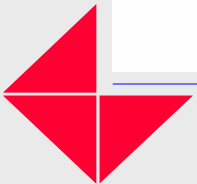
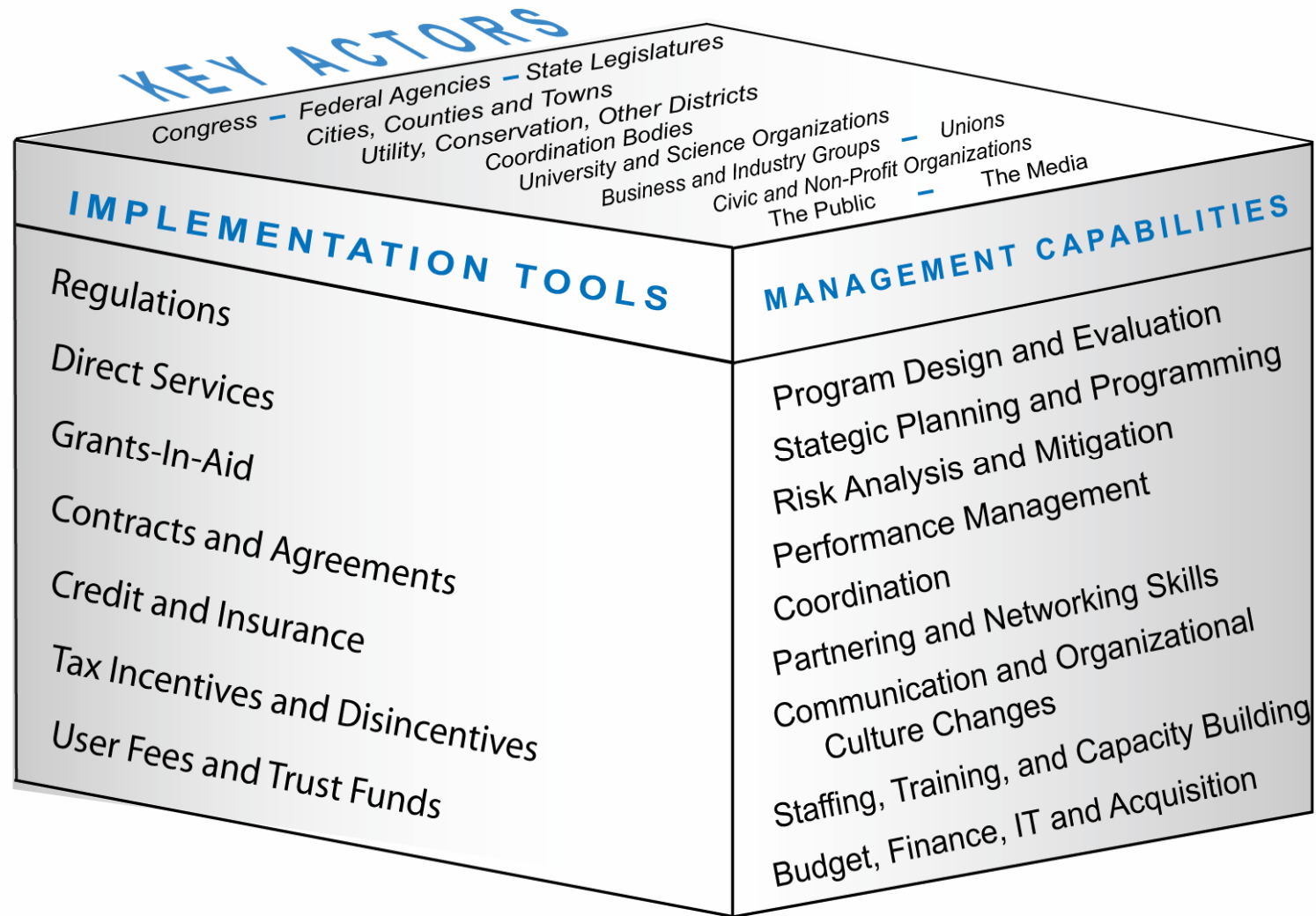
# Key Stakeholders

- ❖ Each of these Key stakeholders uses a unique variety of implementation tools to help the Bay.



# Simplified Analytical Framework

- ❖ The Academy used this analytical framework to more fully understand **HOW** the key actors manage their implementation tools to help clean the Bay.



# MAIN FINDINGS:

## THREE MAJOR GAPS IN IMPLEMENTING "IMPAIRED WATERS"

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### 1. Funding to Implement Clean-up Practices

- ✓ Too small to match size of the problem
- ✓ Can't meet judicial deadlines
- ✓ Runoff mitigation is largest part of the gap (ag. & urban)

### 2. Non-Regulatory Implementation Tools

- ✓ Incentivized and voluntary best practices; state and local regulatory options
- ✓ Not well developed or widely deployed
- ✓ Clean-up responsibilities allocated to state & local tributaries
- ✓ No systematic institutional support or accountability mechanisms at implementation level

### 3. Non-Regulatory Partnering is Underdeveloped at EPA

- ✓ A different culture than regulatory delegations & inspections
- ✓ Case studies and principles provided in Academy report
- ✓ Growing importance -- key to runoff mitigation



# Insitutional Landscape

- ❖ Reaching the Chesapeake Bay's pollution reduction goals will require the joint efforts of:
  - ✓ 6 states, the District of Columbia, and 3,169 local governments
  - ✓ 23 federal agencies
  - ✓ 678 watershed associations
  - ✓ a large number of "riverkeepers"
  - ✓ 2 interstate river basin commissions
  - ✓ 30 regional councils (multi-county councils of local governments)
  - ✓ 36 state-created tributary strategy teams
  - ✓ 87,000 farm owners
  - ✓ 5-6 million homeowners
  - ✓ hundreds of lawn care companies
  - ✓ an uncounted number of land developers, homebuilders, construction companies, agribusinesses, and other companies that send pollution to the Bay
  - ✓ a very large number of civic and non-profit organizations
- ❖ Quite a challenge





# MAIN RECOMMENDATIONS

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- ❖ **Partnering:** Strengthen EPA's culture of partnering with new protocols, practices, training, and employee incentives.
- ❖ **Impaired Waters:** Bring nonpoint pollution-control programs into parity with point-source control programs; focus on agricultural and urban runoff.
- ❖ **Local Support:** Provide support for intergovernmental coordination and accountability organizations to promote impaired waters implementation at the tributary level.
- ❖ **Funding for Implementation:** Develop a sustainable fee-based fund in each state dedicated to water pollution control from all sources. This fund should be:
  - ✓ Sufficient to systematically reduce the size of the state's impaired waters list
  - ✓ Replenished from regular sources of federal, state, and local revenue linked to activities that cause water pollution
  - ✓ Available to mitigate pollution generated by all the main sources based on intergovernmentally determined priorities



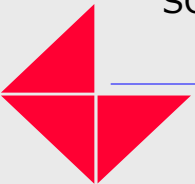
# Six Principles of Effective Consultation

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❖ Collaborative skills are profoundly important to success.

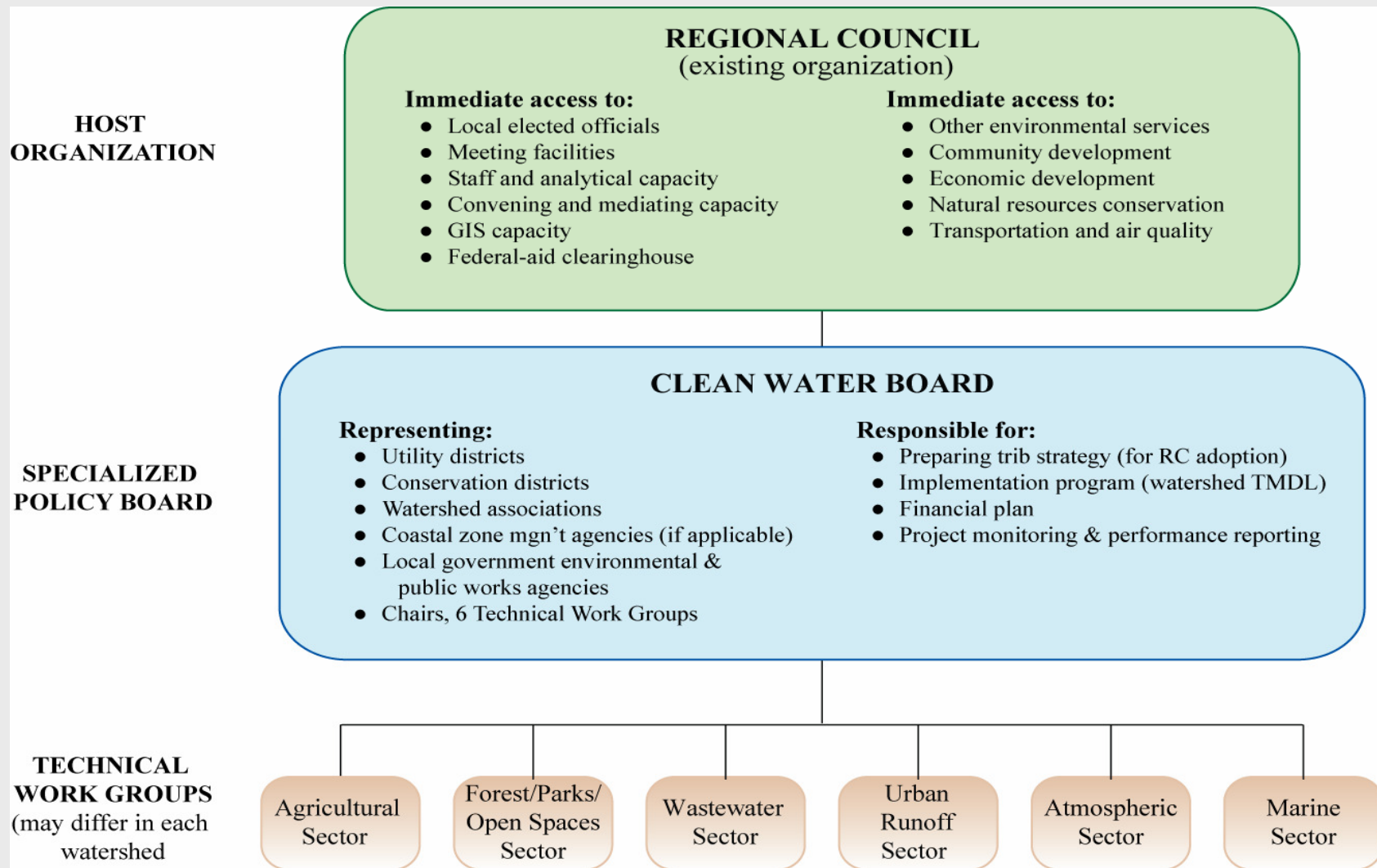
1. Inclusive and well known process
2. Stakeholders assisted to participate effectively
3. Two-way information exchange
4. Timely access to decisionmakers and timely feedback to stakeholders
5. Satisfaction with the process
6. Influence on results

SOURCE: National Academy of Public Administration: *Rural Transportation Consultation Processes*, May 2000.



# Tributary Strategy Insitutions

- ❖ Tributary Strategy institutions could take many forms. Here is one form that would make good use of existing organizations.



# Principles for Federal Managers of Community-Based Programs

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- ❖ Many federal managers are not equipped to participate in collaborative processes. Yet, effective participation by them is critical to the partnership's success.
  - ✓ Recognize that success will be bottom-up, not top-down
  - ✓ Use a community-based management forum to involve all stakeholders
  - ✓ Get a state, local or non-governmental organization to sponsor the forum
  - ✓ Tailor the forum to meet the federal purpose as well as local needs
  - ✓ Be forthcoming about what the federal government can and cannot do
  - ✓ Expedite the process by keeping it simple
  - ✓ Understand the different roles of advocates and others
  - ✓ Treat all participants with respect
  - ✓ Use professional facilitators
  - ✓ Provide technical analyses that all can trust
  - ✓ Limit research to essential questions that require more information
  - ✓ Frame issues to produce timely decisions
  - ✓ Consider only options that would be practical to implement
  - ✓ Seek short-term accomplishments



# POTENTIAL FOLLOW-UP

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**1. Performance Metrics.** The key to cleaning up impaired waters (and many other environmental problems) is systematic real-time reporting of progress in meeting the specific pollution reduction targets that have been allocated to specific users of land, water, and air resources.

- ✓ Existing data systems are not adequate to support this requirement.
- ✓ New technologies make improved accountability systems increasingly feasible.

**2. Assessment of Other Environmental Programs.**  
Criteria for choosing other programs to study:

- ✓ Non-point sources of pollution
- ✓ Environmental outcome desired
- ✓ Dispersed responsibilities for implementation (intergovernmental to public/private)
- ✓ No clear regulatory authority or other direct path to implementation



# QUESTIONS?

